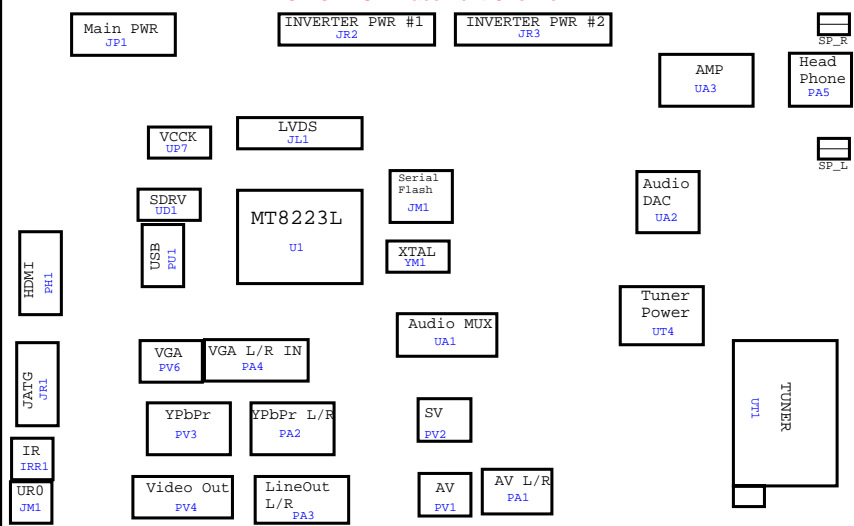
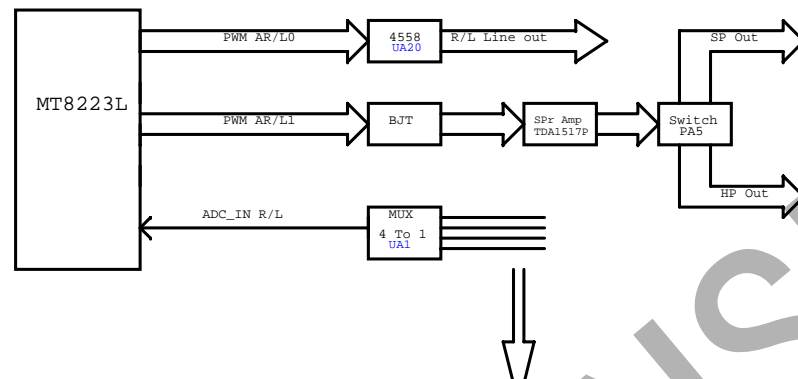


# MT8223L PCB Placement Overview

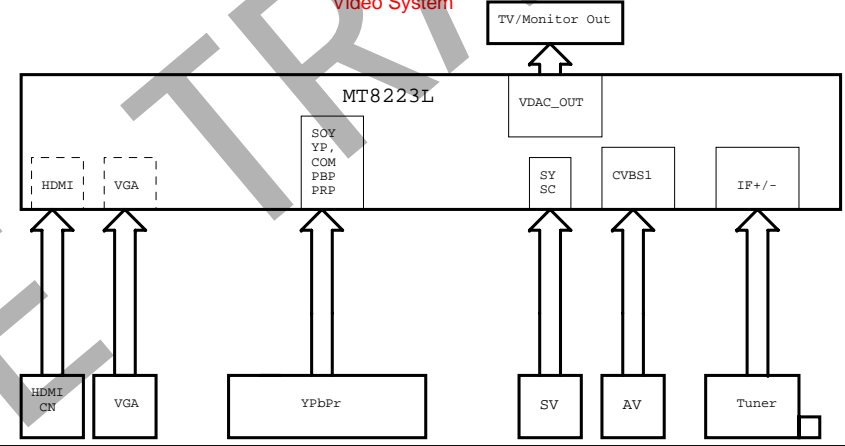


## Audio System

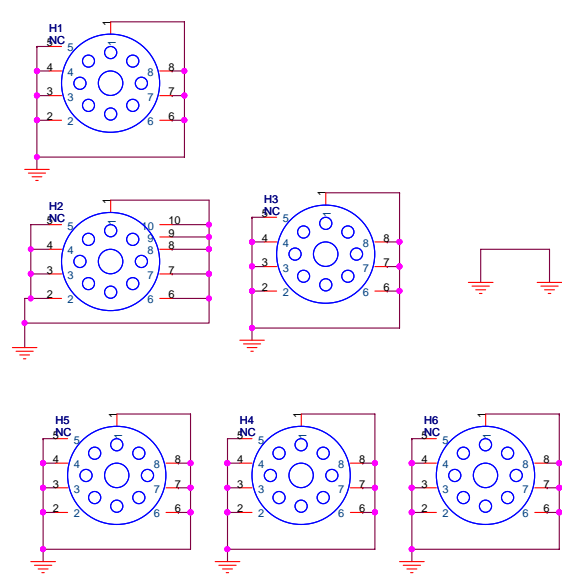
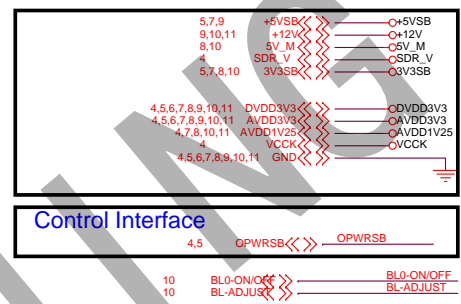
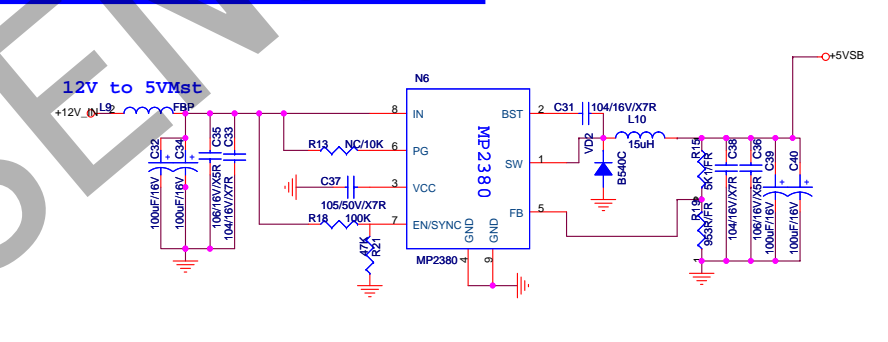
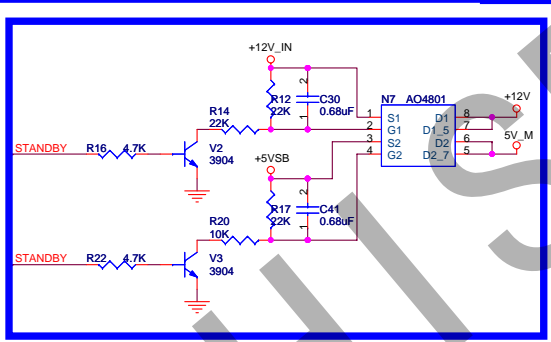
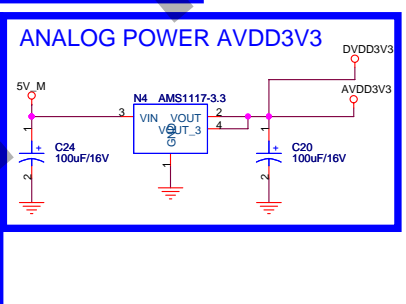
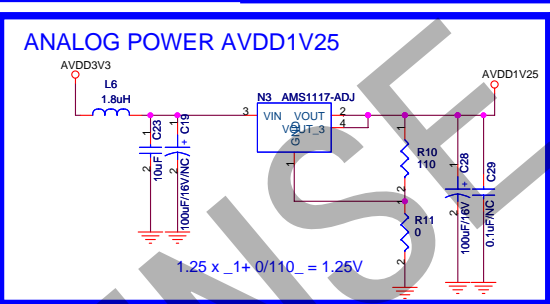
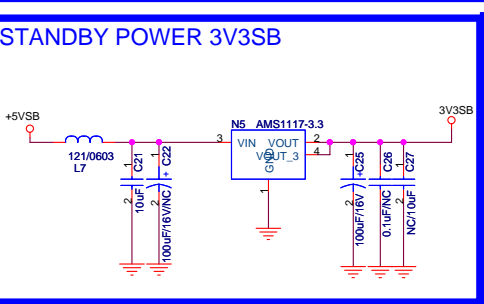
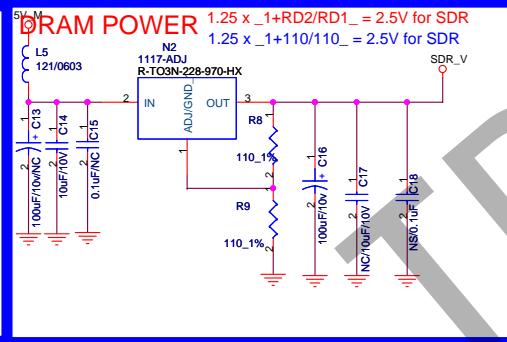
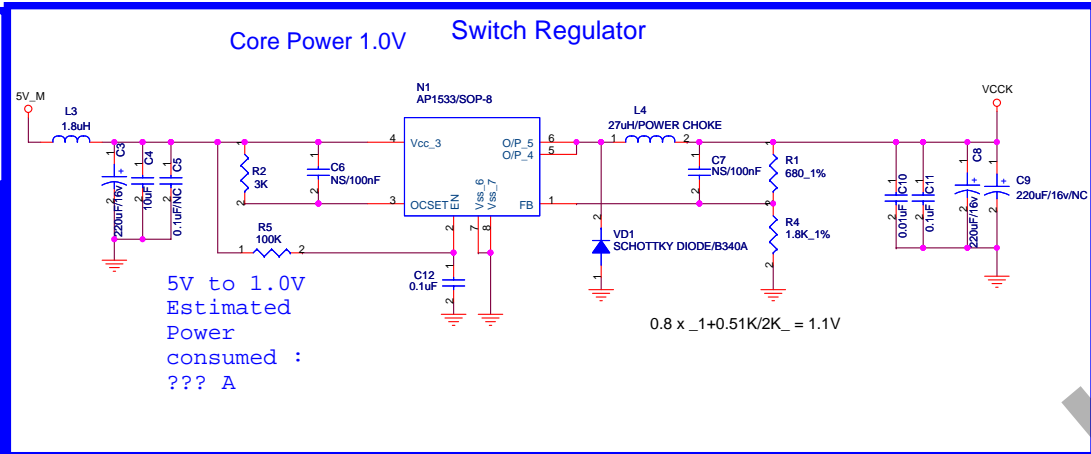
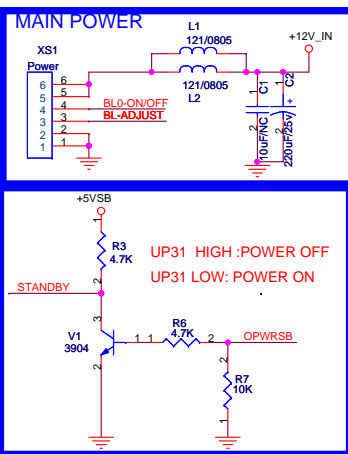


Audio Source	U1TX	U1RX
AV1/S-V	H	H
YPBPR	L	H
VGA	L	L

## Video System



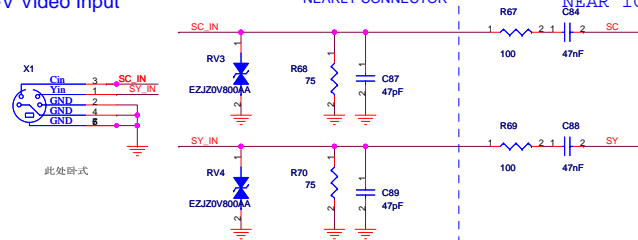
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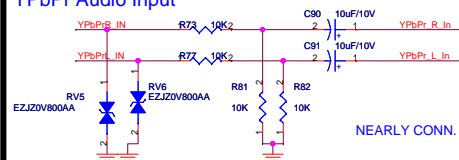




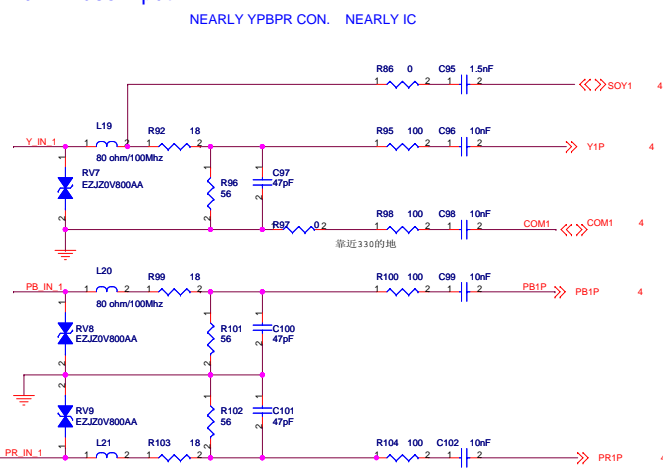
### S-V Video Input



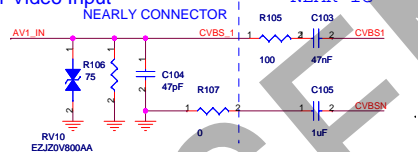
YPbPr Audio Input



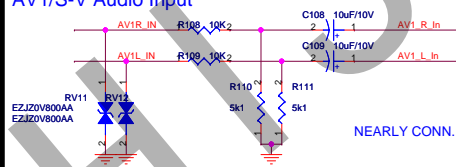
## YPhPr Video Input



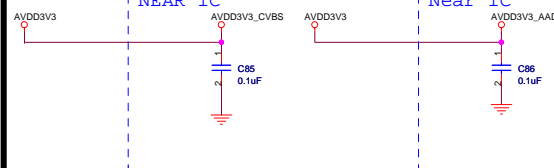
## AV1 Video Input



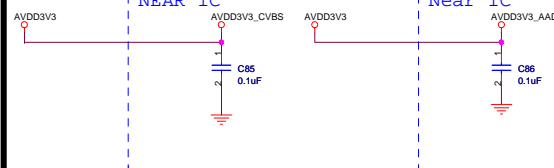
## AV1/S-V Audio Input



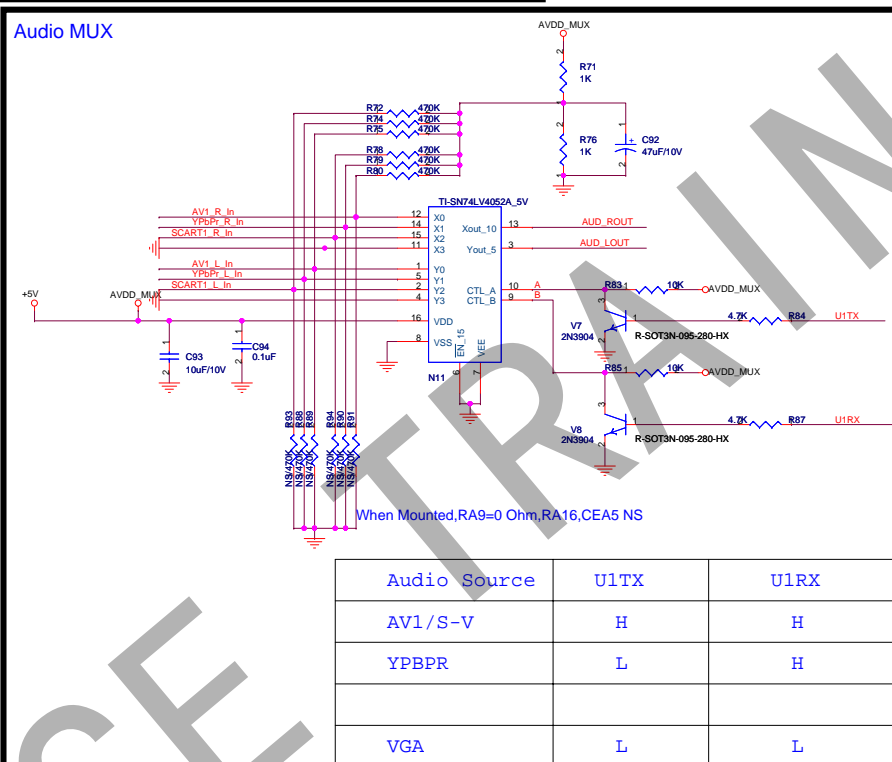
## NEAR IC



## Near IC

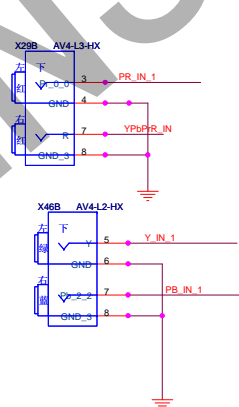


## Audio MUX

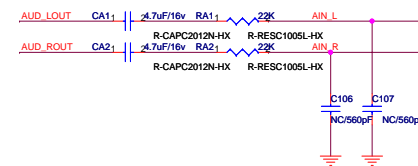
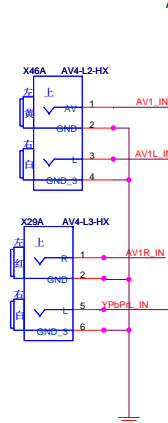


Audio Source	U1TX	U1RX
AV1/S-V	H	H
YPBPR	L	H
VGA	L	L

## HDTV



AV1\_input

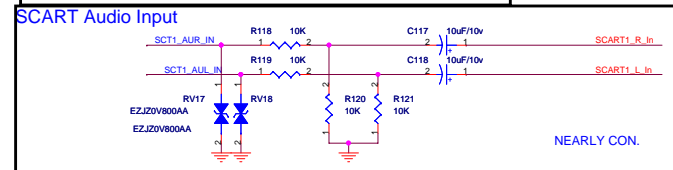
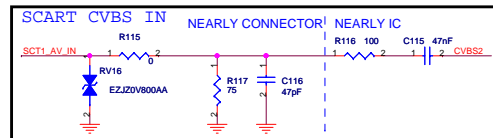
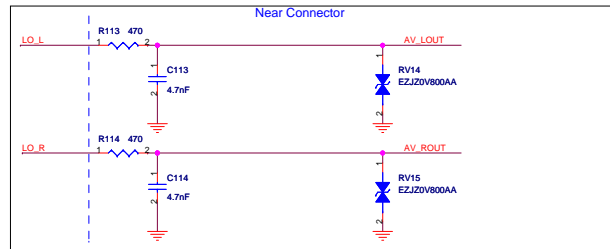
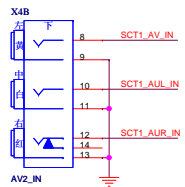
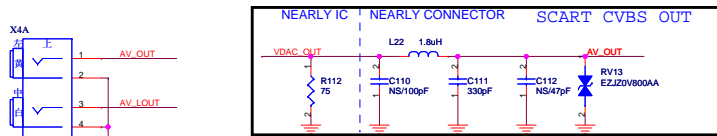


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TEL: 03 567-0766 FAX: 03 576-7610

Title	AV/S-V/YPbPr/Audio MUX
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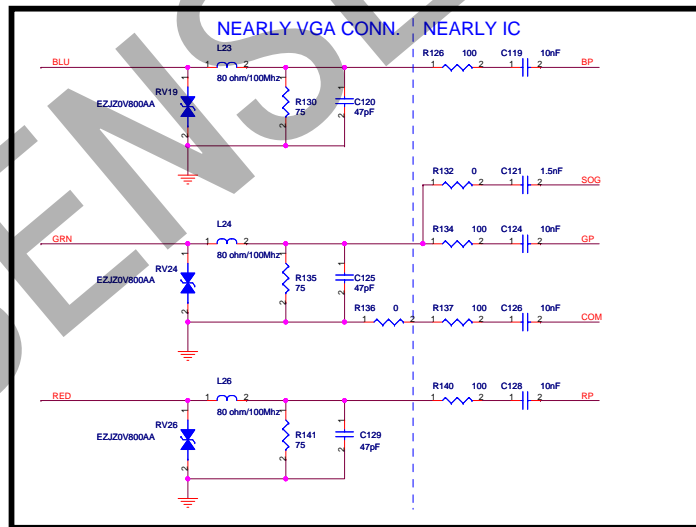
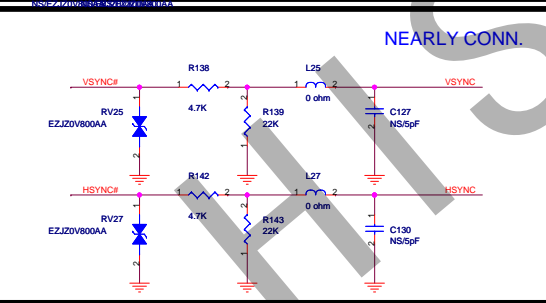
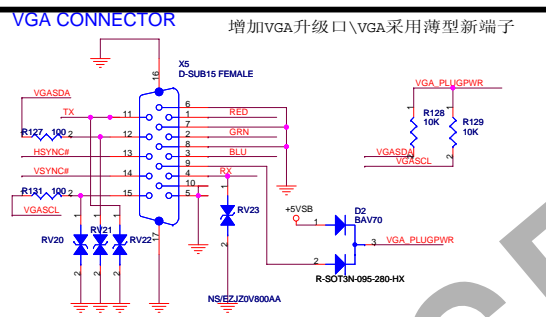
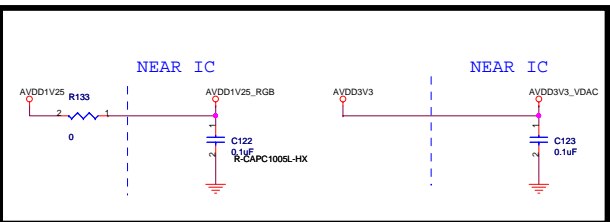
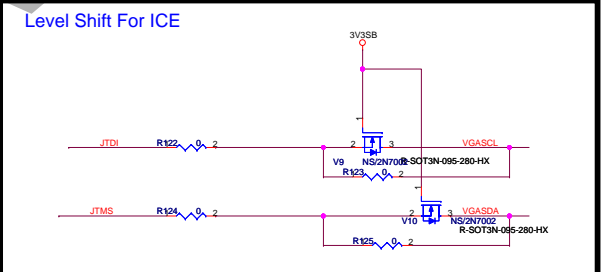
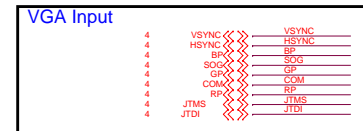
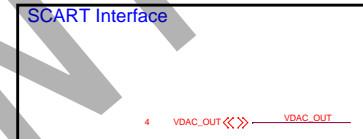
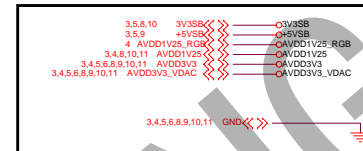
Size C	Document Number <b>MT8223LM1V1 EVB</b>	Drawn <i>Max Yang</i>	Rev 0.
Date:	Monday, March 22, 2010	Sheet 6 of	11



3,4,5,6,8,9,10,11 DVDD3V3 <<<>>> OVDD3V3

GND <<<>>> GND 3,4,5,6,8,9,10,11

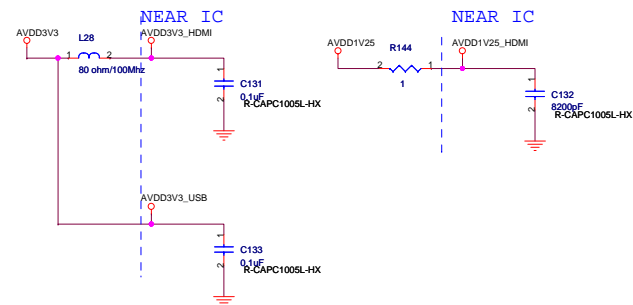
3,8,10 5V\_M <<<>>> C5V\_M  
6 SCART1\_R\_IN <<<>>> SCART1\_R\_In  
6 SCART1\_L\_IN <<<>>> SCART1\_L\_In  
4 CVBS2 <<<>>> CVBS2



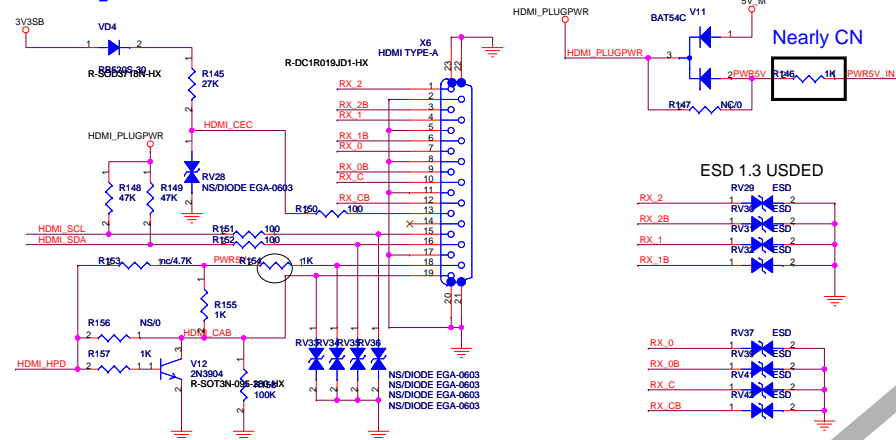
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MediaTek Inc.		No.1-2, Innovation Rd 1, SNNP, Hsin-Chu City 300	
Title		TEL: 03-587-0766 FAX: 03-576-7610	
SCART/VGA			
Size	Document Number	Drawn	Rev
Cust	MT8223LM1V1 EVB	Max Yang	0.1
Date	Thursday, March 18, 2010	Sheet	7 of 11

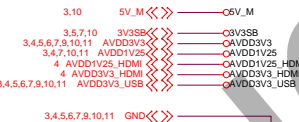
## HDMI/USB Power



## HDMI port



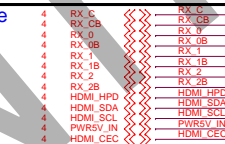
Internal EDID, Sink\_HPDP\_True of  
CDF File Select "Power On"



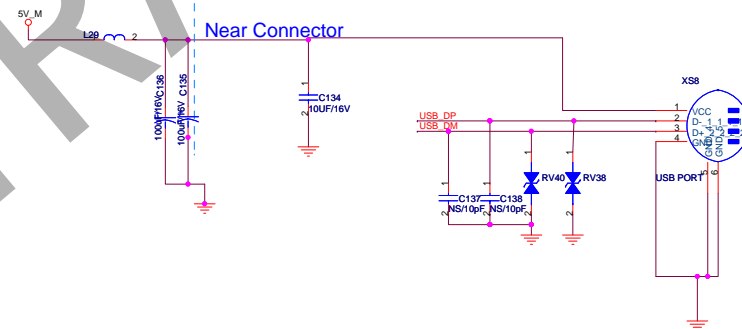
## USB Interface



## HDMI Interface

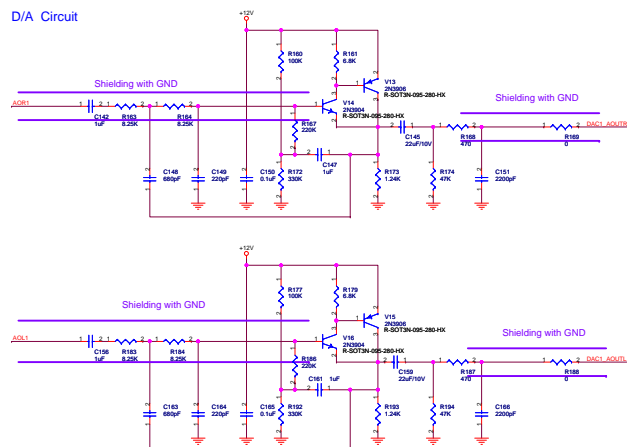


## USB PORT

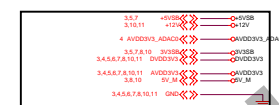
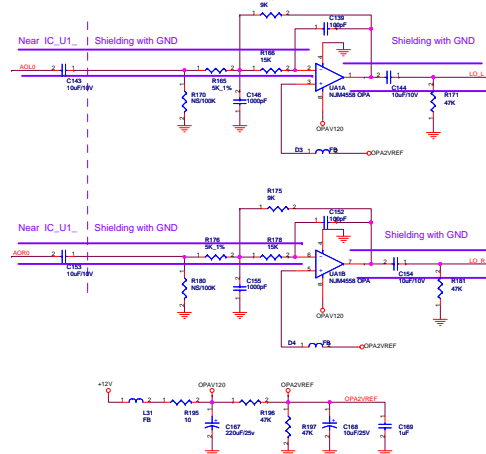


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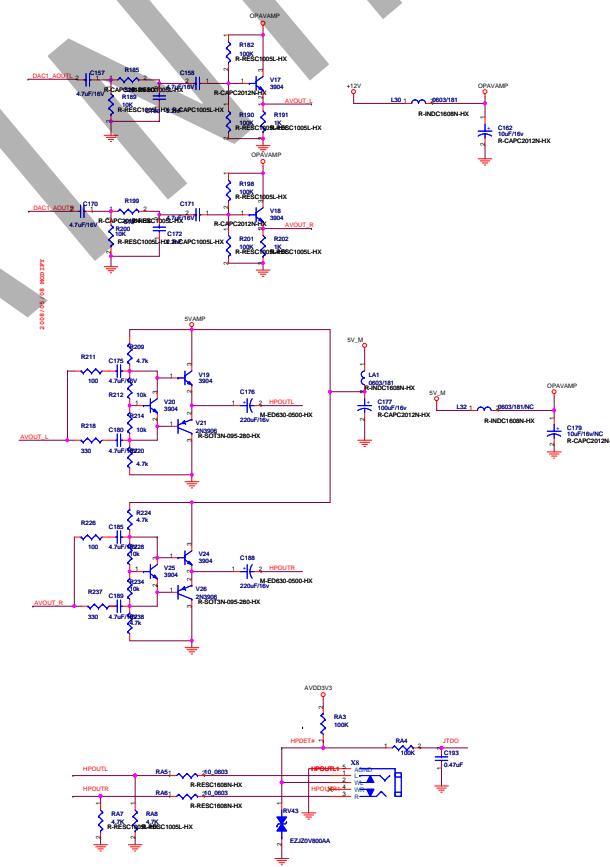
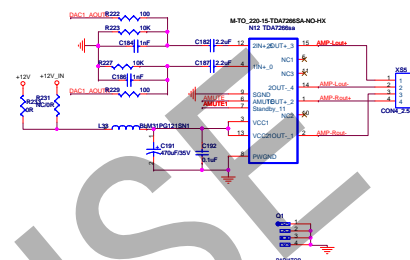
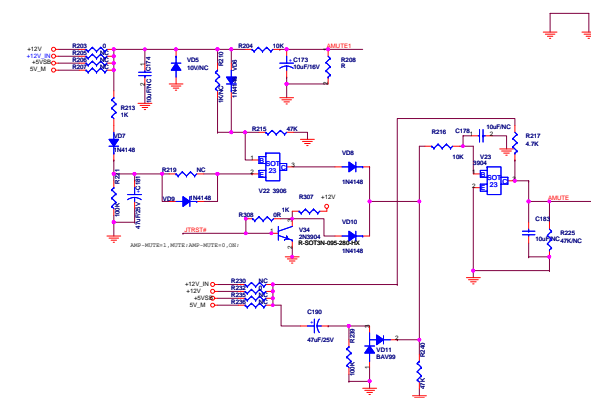
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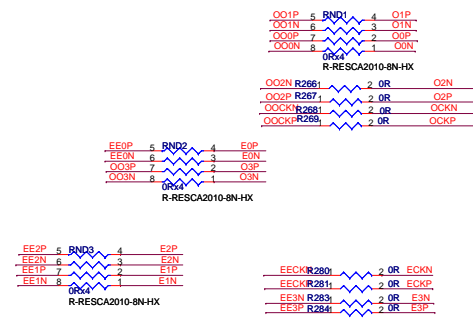
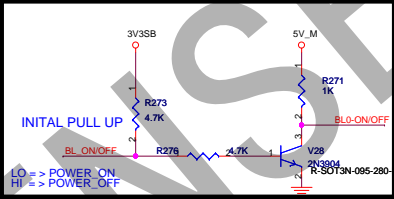
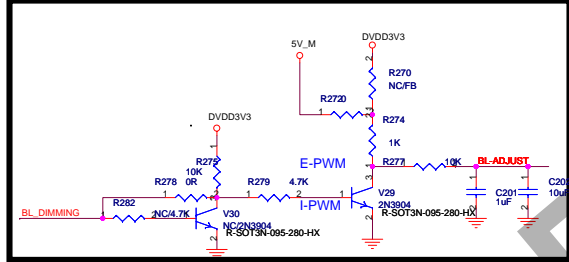
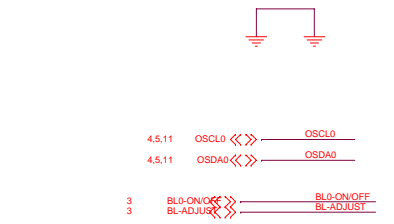
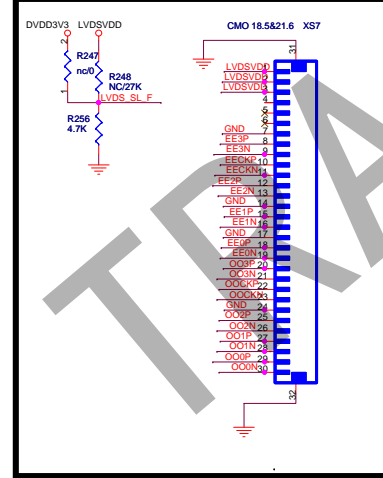
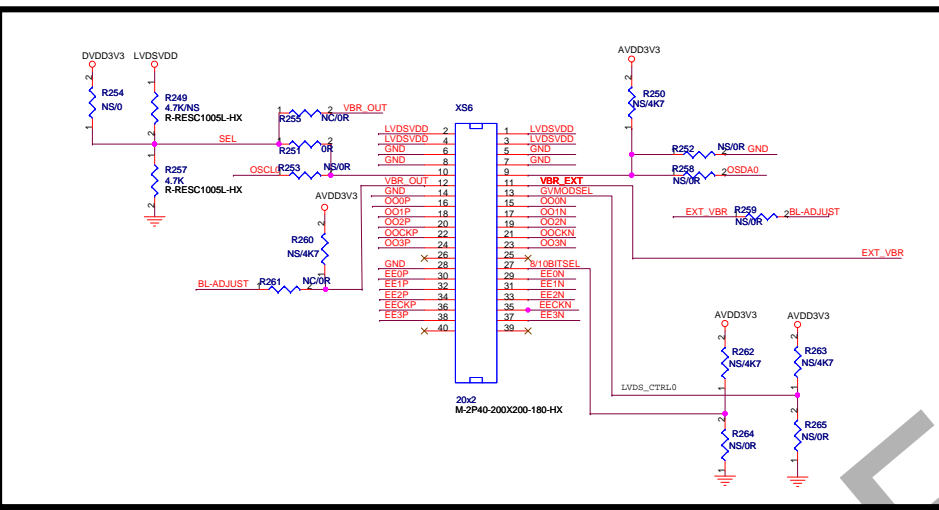
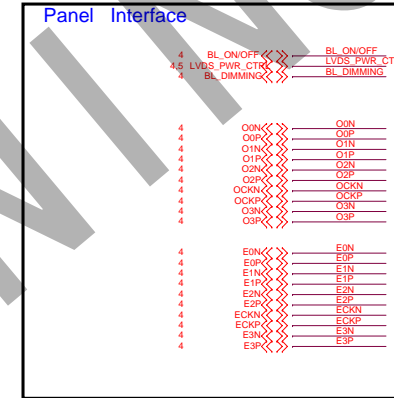
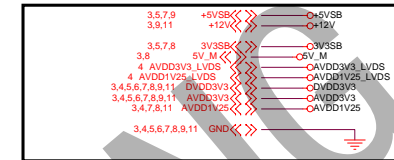
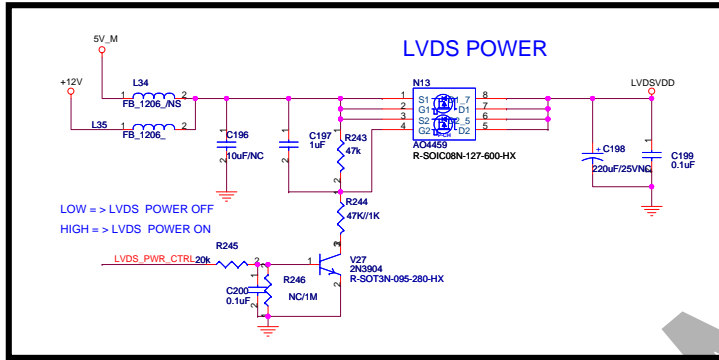
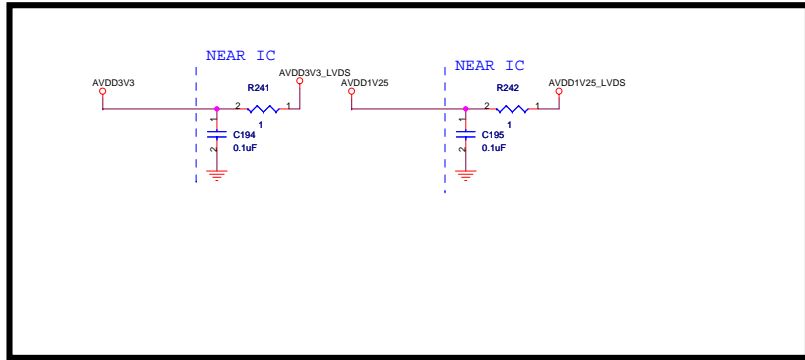
Audio输出信号来自芯片



3 4 5 6 7 8 9 10 11 **ANALYSIS**                                      







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File			
LVDS/Back Light			
Size	Document Number	Drawn	Rev
C	MT8223LM1V1 EVB	Max Yang	0.1
Date:	Friday, March 19, 2010	Sheet	10 of 11

# Tuner

Uniformly distributed around tuner,  
First top layer, then Second layer.

### IF-BPF

Nearly IC

Nearly IF Path

Different signal, keep the same trace width, space and gnd shielding on top layer

**POWER**

4.6  
3.9,10  
3.4,5,6,7,8,9,10 DVPD3V3  
3.4,5,6,7,8,9,10 AVDD3V3  
3.4,5,6,7,8,9,10 AVDD3V3  
3.4,7,8,9,10 AVDD1V25  
4 AVDD3V3\_DEMOD  
4 AVDD1V25\_DEMOD  
3.4,5,6,7,8,9,10 GND

○+5V  
○+12V  
○DVPD3V3  
○AVDD3V3  
○AVDD3V3  
○AVDD3V3  
○AVDD1V25  
○AVDD3V3\_DEMOD  
○AVDD1V25\_DEMOD

AVDD1V25\_DEMOD

GND

Pin 4 connections for the ADXL345 module:

- Pin 4: IFN (Interrupt Function) - Connected to IFN
- Pin 4: IFP (Interrupt Polarity) - Connected to IFP
- Pin 4: RF-AGC (Radio Frequency Automatic Gain Control) - Connected to RF-AGC
- Pin 4.5: BOOST-PWM (Boost Pulse Width Modulation) - Connected to BOOST-PWM
- Pin 4.5, 10: OSDA0 (On-Chip Self-Test) - Connected to OSDA0
- Pin 4.5, 10: OSCLO (On-Chip Self-Test) - Connected to OSCLO

### DEMOD POWER

DEMOD POWER

AVDD3V3

R302

0

1

2

NEAR IC

AVDD3V3

DEMOD

AVDD1V25

R303

0

1

2

NEAR IC

AVDD1V25

DEMOD

C223

0.1μF

C224

0.1μF

[illegible]

**TUNER POWER BT\_30V\_\_wanglinpeng20091027**

BT\_30V

C225 10uF/50V

V21 0.1uF/50V

C33V 330V

R304 1K

X305 100K

C227 10uF/50V

VD12 1N4148

L42 47R

L43 100uH

+12V

20100106

V33

R306 15K

Boost PWM

VD13 1N4148